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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/834,901 | 04/16/2001 | Young-Hyun Kang | P56352 | 5378 |

7590        01/29/2007

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| EXAMINER |
|---|
| REFAI, RAMSEY |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2152 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 01/29/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>30 October 2006</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-14</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application
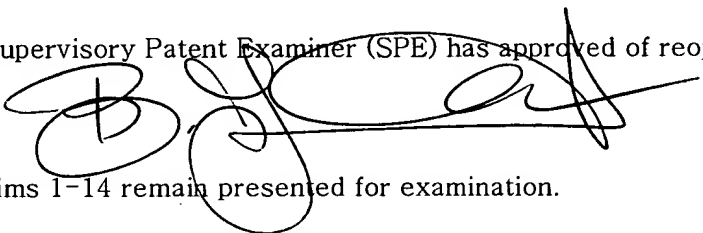
6) ☐ Other: _____.

## DETAILED ACTION

In view of the Appeal Brief filed on October 30, 2006, PROSECUTION IS HEREBY

REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following

two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an

appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee

can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have

been increased since they were previously paid, then appellant must pay the difference between

the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below:

1.      Claims 1-14 remain presented for examination.

*Claim Rejections - 35 USC § 103*

2.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived
by the manner in which the invention was made.

3.      Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US

Patent No. 5,946,373) in view of Davis et al (US Patent No. 6,826,157).

4.      As per claim 1, Harris teaches a method for managing alarm information in a network

management system, comprising the steps of:

receiving alarm information generated from any of a plurality of network elements

(column 1, lines 9-30);

determining whether or not said alarm information corresponds to an alarm (column 4,

lines 3-15, column 1, lines 17-30; recognizes alarm from message);

determining the location of the network element generating the alarm information, when

it is determined that the alarm information corresponds to an alarm (column 2, lines 25-57;

detects and locates faults from alarm data);

searching a database to determine whether said database already has said alarm

information stored therein, according to the location of the network element generating the alarm

information (column 4, lines 15-29, column 11, lines 8-20);

storing said alarm information when it is determined that said database does not have

said alarm information already stored therein (column 4, lines 25-29; adding new alarms);

increasing a count value representing a number of times in which the same alarm

information has been generated, without redundantly storing said alarm information into said

database, when it is determined that said alarm information is already stored in said database

(column 8, lines 7-35, column 11, lines 8-20; alarm counter incremented); and

storing the increased count value at a position corresponding to said alarm information

already stored in said database (column 8 lines 8-35).

Harris teaches alarms such as loss of signal (fig 2C, column 6, lines 55-67) but fails to

teach that the alarm is a logical alarm. However, Davis et al teach maintaining an error counter

for tracking the number of errors detected at network layers such as the data link layer (column

8, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the

applicant' s invention to combine Harris and Davis et al cause doing so would create a method

for managing alarm information into a database of errors from a specific network layer.

5.      As per claim 2, Harris teaches wherein the step of searching said database further

comprises the steps of analyzing said alarm information to detect its positional value and event

type; and determining whether said database has the alarm information of the same positional

value and event type  (column 4, lines 4-29, column 5, lines 37-60).

6.      As per claim 3, Harris teaches wherein the step of searching said database further

comprises the steps of:

        detecting the positional value of said alarm information from its data format (column 4,

line 6); and identifying destination information by analyzing a virtual path identifier and a virtual

channel identifier of subscriber connection information corresponding to the alarm location to

determine an identity of a subscriber from which said alarm information was generated (column

5, lines 37-60).

7.      As per claim 4, Harris teaches a step of parsing said alarm information for storage into

said database when it is determined that the alarm information does not correspond to a logical

alarm (column 4, lines 3-15, fig 2A).

8.      As per claim 5, Harris teaches wherein said database comprises a plurality of network

element tables, each corresponding to a respective one of said network elements, said step of

storing further comprising storing said alarm information into the corresponding network element

table of said database according to the location of the network element (column 5, lines 3-60,

column 4, lines 49-55).

9.      As per claim 6, Harris teaches a step of converting the alarm information through a

database application interface into a database data format of said database to be recorded as

new alarm information in the network element table of the network element generating the alarm

information (column 4, lines 3-30, column 5, lines 38-60).

10.      As per claim 7, Harris teaches displaying said alarm information stored in said database;

(column 1, lines 9-18, column 2, line 66-column 3, line 10;) but fails to *explicitly* teach entering

search parameters for finding a particular error corresponding to the alarm information or for

finding a particular network element and its corresponding alarm information; and displaying

information retrieved as a result of said step of entering search parameters. However, it would

have been obvious to one of the ordinary skill in the art to include a feature that allows a user to

search a database using search parameters and to display the requested data because doing so

would allow a user the ability to locate specific information in the database such as specific

network error information in order to locate and correct the problem,

11.      As per claims 8-14, these claims contain similar limitations as claims 1-7 above,

therefore are rejected under the same rationale.


*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's

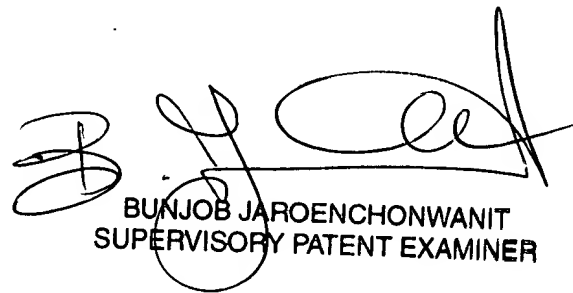disclosure are cited in the Notice of Reference Cited form (PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner

can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner' s

supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai
Examiner
Art Unit 2152
January 19, 2007

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER